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In these lectures, three aspects of the educational experience are discussed: exploration, conversation, and creation. Exploration is the free reaching outward, compelled by curiosity, wonder, and excitement. This is not necessarily associated with formal education, but must be achieved through the discipline of order and precision; such growth must continue beyond the beginnings in the home and school. The educational dialogue (conversation) involves a struggle between alternatives; the creative engagement with opposing facts or ideas, either with oneself or others. Unlike other dialogues, the moral and intellectual rules appropriate to mutual enlightment call for insight and understanding, a sense of significance, honesty, mutual respect, and contributions by all members, with a balance between assent and dissent. Education as creation occurs as an adult turns to the task of making himself grow in understanding of life, of becoming something, by searching for values through literature and discussion. (pt)

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# The Redfield Lectures

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THE FUND FOR ADULT EDUCATION

# The Educational Experience

*by*

Robert Redfield

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ROBERT REDFIELD is an anthropologist whose interests in education arise out of his interest in human beings. He was admitted to the bar of Illinois but left the law to study anthropology and sociology at the University of Chicago, where for many years he has served in the Department of Anthropology and on the Committee on Social Thought. For twelve years he was Dean of the Division of the Social Sciences. He has studied primitive or peasant communities in central Mexico, Yucatán, and Guatemala, and has contributed to scientific understanding of folk peoples and of what happens to them with the advance of civilization. He is particularly interested in the relations between humanistic and social science research. He has been visiting professor or lecturer at Cornell University, the University of Paris, Upsala University, Goethe University at Frankfort, and National Tsinghua University in Peiping.

Dr. Redfield has helped to direct the program in general education of the College of the University of Chicago. He has taken part in the University of Chicago Round Table and in other broadcasts or public discussions, has participated in the adult education program of the Aspen Institute, and has contributed to magazines and professional journals concerned with education. He gave assistance to the National Association for the Advancement of Colored People in efforts with regard to segregation in the public schools and took part in the case of *Sweatt vs Painter*. He has been director of the American Council on Race Relations, president of the American Anthropological Association, and a member of the Commission on the Freedom of the Press; and he is now a director of the American Council of Learned Societies and of the Social Science Foundation. He is a member of many scientific and learned societies.

His books are *Tepoztlán, a Mexican Village* (1930), *Chan Kom, A Maya Village* (with Alfonso Villa Rojas, 1934), *The Folk Culture of Yucatán* (1941), *A Village that Chose Progress* (1950), *The Primitive World and its Transformations* (1953), and *The Little Community* (1955).

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# *Introduction*

THE Fund for Adult Education is an independent organization established by The Ford Foundation in 1951. Its responsibility is to improve methods and opportunities in that part of the educational process which begins when formal schooling is finished. Its special focus is on liberal adult education. Liberal adult education is the unending education of the mature person for the sake of his development as an end in his own right and as a citizen in a free society.

The purpose of The Fund for Adult Education Lectureship is to advance the cause of liberal adult education through an annual message to the American people on its importance, its significance, and its implications. Each year a distinguished person who has made an outstanding contribution to the conception and advancement of liberal adult education is invited to give the lectures. The lectures are given under the auspices of an educational institution which has a real interest in adult education.

The first lecturer in this series was Lyman Bryson, now Professor Emeritus at Columbia University, who gave three lectures under the auspices of the University of Wisconsin in the Fall of 1953. His theme was "Reason and Discontent—The Task of Liberal Adult Education."

The present lectures were given by Robert Redfield, Professor of Anthropology at the University of Chicago. They were given under the auspices of the University of California. The theme was "The Educational Experience." The three lectures were: "Exploration," "Conversation," and "Creation." Number one was delivered in Riverside on December 6, 1954, number two in Santa Barbara on December 7, and number three in Berkeley on December 2 and Los Angeles on December 8.

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# Exploration

*First lecture, delivered in Riverside, California,*
*December 6, 1954*

EDUCATION is a desirable experience of a particular kind, in this respect like falling in love, joy, and the state of grace. It is a good thing that happens inside people. As a teacher, I often think of education as something I am doing to somebody else, but I must admit that I am not often sure that I have done it. In my own self I feel now and then the educational experience, and in the lives of others I see its signs.

Its causes are obscure, but I should not be a teacher if I did not think that there is much that can be done to bring about this kind of desirable experience. Formal arrangements favorable to education are more effective, I suppose, than are formal arrangements for falling in love. I would not close the schools or give up forums

for adult discussion. But to judge the success of any particular such arrangement, one must be able to recognize the educational experience when it occurs.

The word "growth" suggests the upward change that is education. An inner something improves. The growth takes place in qualities of the intellect and of appreciation, in qualities we dignify with large words: understanding, insight, wisdom. In our kind of society, where all are to take part in making decisions, these qualities are needed by everyone. So we make a beginning with their development in the home and in the schools, and try to remember—although we often forget—that it is only a beginning and that education has no end. After we leave school, the world continues to affect us. The factory disciplines or hurts us; the neighbors and our associates shape us in their own image; the voice of the radio has its insistent way with us. If as grown men and women we do not trouble to continue our education, the world will make us in its own way, good or bad.

In thinking about education it is helpful to distinguish training, something also desirable and indeed indispensable, but of a lower order. Training is the formation of useful habits. In spite of claims to the contrary, there are no educated horses, only trained ones. Like animals, men form useful habits, and some are habits no animal can form, like speech and literacy. Training serves two ends: it prepares us to do useful work, and it frees the mind for education. A great deal of training is given in that which we call "technical education." There is a conflict between technical education and liberal education only in so far as the technical education stops at training. Unfortunately it often does.

In adult life there is at least one circumstance favorable to carrying on an education: maturity. For making the discriminations and judgments implied by the word "wisdom," some years of experience are helpful. If one arrives at maturity with some training achieved, one is at least prepared for education. Training comes easier in youth than it does later. But although there is some correspondence of youth with training and of maturity with education, either can happen at any time of life. An occasional grandmother learns Greek grammar. The education of children may begin when they are very young indeed. Often its beginnings are by accident,

through some book or person that illumines and gives wider significance to the world around the child.

The very young experience also education by intention. When Edmund Gosse was not yet four, he watched his father draw a chart of markings on the carpet, then of the furniture in the room, then of the floor of the house, then of the garden. The child was too young to draw the plan himself. He just watched. Gosse tells us that as a result "geography came to me of itself, as a perfectly natural arrangement of objects." This was education; the child caught an insight of fundamental worth about the nature of geographic representation.

While we are distinguishing education from things like it but different, let us acknowledge that education is not the same as the pursuit of information or even of learning. One may acquire information only and so become a bore. One may acquire learning only and so become a pedant. For a striking example of a bore, see old Joseph Finsbury in *The Wrong Box*, of whom it is written that "a taste for information had sapped his manhood." For an outstanding pedant, see Dr. Middleton of Meredith's novel, *The Egoist*. To convert knowledge into education it must be leavened with imagination and carried forward into the life one lives with others. Knowledge cherished as a private possession, learning pursued in a cell of life separated from the other rooms of existence, does not educate.

Perhaps the commonest confusion identifies education with schooling. But anyone who has had schooling, even in a good school, knows that many hours are passed there, sometimes very pleasantly, that are not educational. When we have built a school building and hired teachers, the problems and the uncertainties of education are just beginning. The abundance of schools conceals the rarity of education. One of the reasons why the education of adults is a field ripe for development lies in the fact that so many of us leave school with most of the job yet to be done. Necessary as it is to have schools and to improve what goes on in them, they are, for some people, dispensable. Education has taken place with little or no schooling, or in spite of it. The case of Abraham Lincoln will be always remembered. One of our able American writers, Richard Wright, became an educated man by extra-curricular self-teaching,

and accomplished this although the influences of his childhood were chiefly those of ignorance, vice, violence, and fear. His education began with a schoolteacher, but out of school. She boarded with his family and one day read him the story of *Bluebeard and His Seven Wives.* Wright tells us "the tale made the world around me be, throb, live. As she spoke, reality changed, the look of things altered, and the world became peopled with magical presences. My sense of life deepened and the feel of things was deepened, somehow." His grandmother beat him for listening to this story; she called it "the Devil's work." But with it his education began. The paths to education are various and curious. The young Negro boy, his imagination aroused, then feasted it on sensational stories in the newspaper supplements, moved on to forge an order that got him a book from a library closed to colored people, and to read his first serious novel, *Main Street.*

Many a man who has produced major works of the mind has found his formal schooling of no importance in his development. Henry Adams reckoned his school days as time thrown away and remarked of his experience at Harvard that "the entire work of the four years could have been easily put into the work of any four months in after life." This evaluation should encourage those of us who set about educating ourselves after leaving school. In his memoirs Charles Darwin wrote of the Shrewsbury school—outside of which he now sits in stone, a benevolent, bearded figure—that "nothing could have been worse for the development of my mind than Dr. Butler's school . . . as a means of education to me it was simply a blank." He regarded the three years he had spent at Cambridge University as completely wasted; Edinburgh University "sickened" him and the only effect on him of the geology lecture was, he says, "a determination never again to read a book on geology." It may be added that Darwin overcame this particular school-acquired repugnance, for it was a reading of Lyell's *Principles of Geology* that so stimulated his mind during the famous voyage of the "Beagle."

Of course very many have in school more fortunate experiences. Schools we must have, and better ones than we now have. But the dependence of education upon schooling is not absolute, and no school and university together do anything more, at the best, than

get education started. The men who became educated in spite of what happened to them in classrooms remind us how great is the self-educability of a determined person.

Such a person, adult and resolute, may make his own education in his own way. No particular program is right for everyone. Distrust the claim that someone has found the ultimate curriculum, the right way to learn for all men. Some elements of education men must have in common with one another so that in their societies they share common purposes, common understandings as to the good life. But formal programs of education result not so much from the nature of man, which is various enough to find many different roads to education, as from the necessities of teaching twenty adults in a room or ten thousand children in a school system. Programs are needed, but each is suspect, because a program tends to say, "Conform," when the true end is, "Be yourself." To meet together, as adults, and discuss what we have read in some of the great works of the mind is as good a program of adult education as I know. It is good because the examples of thought and appreciation are among the greatest, and because the ideas offered for our consideration are among the most important. On the other hand, no list of books is sure to provide the best education for everyone, and there are times when minds go forward fastest through lesser books, even bad ones, or away from books entirely. What matters is that one find a way, orderly enough for that one, in which to promote, in pleasure and in pain, the inner growth of which I speak.

Consider the variety of the paths by which men have become educated in school and out. Some of us in America look with admiration at the achievements of classical schooling in the French *lycée* or the German *gymnasium*. When the circumstances were just right, the education resulting was indeed impressive. An example of this is provided by the account given of his schooling by André Maurois. His was a bookish family, devoted to education. His mother read aloud to him, poetry especially, when he was a very small boy; he himself learned to read very young and lay in a lilac tree and read Perrault, Hans Christian Andersen, and Jules Verne. From his sixth to his eighth year private teachers taught him the beginnings of English, German, and music. In the junior *lycée* he

found no more than ten or twelve boys in classes instructed by teachers who were educated men devoting themselves with passion to the task of molding successive generations of young Frenchmen. So at the age of ten Maurois made his maiden speech before the class on the subject, "A Comparison of the Esther of Racine with that of the Bible." He was then studying Latin and reading Gogol and Pushkin. At twelve, no prodigy but just a rapidly educated child, Maurois composed a tragedy in five acts in verse about the mistress of Charles the Mad. Such literature as Maupassant and Anatole France he read in these years; in the senior *lycée* he discovered the Latin and the French poets and learned these so well that hundreds of passages remained "by heart"—Ronsard, Victor Hugo, Baudelaire. The essays he wrote weekly were on such a subject as this: letter of Conrart, Permanent Secretary of the Académie Française, to Saint-Evremonde in defense of the Académie against the latter's satire. His last year in the *lycée* was devoted to philosophy. For ten years his attention had been concentrated on matters of form, grammar, style. "Now," he says, "the heavens were lighted up. Epictetus and Epicurus, Plato and Aristotle, Descartes and Spinoza, Locke and Kant, Hegel and Bergson, contended for mastery in our minds." And so on.

Some think such an education impossible in America where so many are to be educated, and some think it undesirable even if it could be provided. In Maurois' case it was possible and appropriate because of French culture and French social conditions. I speak of it as a contrast to the educations which have occurred without such special and fortunate provisions. In spite of Henry Adams' disclaimers, he did manage to get an education, and I suspect he is not quite right in saying that Harvard did not help. Darwin's path to education was indeed largely outside the school; he became educated in the course of his research; he held, year after year, an extraordinary private conversation with nature, asking questions and receiving answers. He began this course while still a schoolboy, and, as his record in school suffered, with collecting box and inquiring mind he was educating himself, in a specialized way, in valleys and upland.

I have know intimately at least one authentically self-educated man. He is a Maya Indian living in a remote bush village in Yuca-

tán. His few years of schooling at a primitive school taught him only the Spanish language, and a little reading and writing. Later, while he was active in affairs of his village, leading it toward material improvement, he developed a habit of reading. He read newspapers, school primers, religious tracts, and government handouts on farming or hoof-and-mouth disease. He obtained a Bible; this was a tremendous help to him; he read the stories slowly and thought and talked about what he read. His education advanced by a sort of natural method, in which his mind moved back and forth between the problems of conduct and action in which he was himself engaged and the ideas his forceful mind found in anything and everything he read. At one time he planned to kill a man he thought was doing him to death with black magic; he discussed with himself the plan in relation to suggestions he had from reading the Gospel and decided against it. At another time he studied a pamphlet about marketing, read in the newspaper the reports of grain prices in distant stock exchanges, and worked out for himself a relationship between the price of corn in his own local market and the quotations in the newspaper. This man had a slow, powerful curiosity about everything, and the course of his education, limited as it was, was carried along in strong convictions of his responsibility to do right and to help the progress of his village. He is a really admirable example of the self-taught.

Cases such as these are not common. Even in America, a country where universal compulsory education got an early start, where public libraries began, and where lectures for laymen have been popular for generations, today the education of the adult is not encouraged by abundant good example. Very few of the people around us are pursuing their education. Very much of what goes on in public life presents examples that it would be fatal to imitate if one were seeking to develop one's own free and rational mind. And base examples are even admired by many Americans who have had what in America is called education. After we have made a tremendous effort to put every child in school and very many in college, the appalling fact remains that today many adults follow a voice that with lies and threats betrays and degrades education and is hateful toward the educated. On the other hand, when an unusual man in public life makes a speech that treats his audience with the

respect due to reasonable and moral men, the impression on many Americans is extraordinarily bracing. Then again we see the possibilities of helping one another to grow in wisdom.

Where are men and women to meet in America to help one another with education? The Danes found the right community for continuing education in those residential groups, the folk high schools and colleges. In England the workers' education movement has achieved much. Here we may yet find in occupational groups, in clubs, in widespread organization of adult discussion, or in further extension of college teaching into many local communities, the kinds of associations that will be right for us.

Perhaps some homes may be redeemed for the mutual education of their members. Many a home presents some favorable elements: an association of people who have a natural concern with each other and who, even nowadays, frequently meet. Moreover, some of the inhabitants may be directly involved in education already, in so far as they are in school. Intellectual and aesthetic exchange with a child, especially one's own, can be educational to both parties. Taste in literature is subject to cultivation in children's books; I can see even before my child can that *The Tailor of Gloucester* is a distinguished work of literature, although it was written as much for the child as for me. Some things one learns best from people of one's own age, but some things are well learned in family relationships because it is these that give the experiences their early significance and beauty. For the adult, too, the learning or relearning takes fresh value when the ideas and discriminations are exchanged with a younger person. When I went over the elements of Euclid with my daughter, I learned things about geometry that school had never taught me, and reading with my son some of the Federalist papers gave me understanding of our Founding Fathers that I should never have gained otherwise.

It is not safe to assume that the school is discharging educational functions that were once carried on in the home. The school is doing things notably different from what was done in the large, old-fashioned families of our grandfathers. When reading was taught in some homes in connection with the reading aloud of the Bible or of other literature, it was no doubt taught less efficiently than it is taught in schools today, but it was taught as a part of

intimate and traditional life. Teachers recognize that the school cannot provide this kind of stimulation to read for the sake of what is in the book and also for the sake of the personal experience in which the reading takes place. Nowadays, thinking of reading only as a technique, the usual parent leaves it to the school. The school, too, thinks of it on the whole as a technique, for that is what it is in the context of learning which the school provides. The teacher tries, against great difficulties, to bring about in the child a set of "good reading habits," with a common result, I fear, that a bored, bright child acquires the only really serious bad habit—the habit of not reading at all. It may yet turn out to be good educational policy to encourage that occasional family in which books are read and read by one to another to teach the children to read before they go to school. My impression is that because of the plans of the school about the teaching of reading, such families are now hesitant to do so. Learning to read arises best in the context of a delight in books. And there will be no growth in such delight until it grows among the adults who make the homes where it flourishes. So the future of the children's schooling and the future of adult education are intertwined.

These preliminary reflections evoke the difficulties of identifying that kind of experience which is truly educational. If education is not training or information or mere learning, if it is not always to be found in school and may take place out of it, if most of us live lives filled with work, recreation, visits with the neighbors, and just sinking back into the Sunday supplement, and if we see around us little to stimulate the effort toward reasonable understanding of the universe—if all this is true, by what shall we know that stranger, that shy one, the educational experience?

I think that something of its nature can be learned from those reflective persons who have told us how it happened to them. These evidences may be joined with what each of us knows of how it happened, at certain times, that his mind and spirit took a leap forward. As a teacher, occasionally, and as a learner, also occasionally, I have knowledge of my own such movements of the mind to contribute to the evidence as to the nature of that inner growth which is education.

In the best book about this subject that I have read, *The Aims of*

*Education*, A. N. Whitehead describes the education of children and young people as a movement of the mind from freedom through discipline to freedom again. The mind begins in a phase of imaginative discovery of experience. There is a free ranging of thought and appreciation. This is the first of the three periods which Whitehead sees. It corresponds with the first twelve years or so of life and with primary education. It is followed, he tells us, by a stage of precision, corresponding with secondary education, in which additional facts are put into systematic order. And this is followed by a mature stage, ordinarily begun in higher education, when again there is freedom to range but in which, now, general ideas are entertained under control of the discipline that has been acquired.

Here I look not at the sequence of stages in the mental growth and schooling of the young, but at the mind's movement in any educational experience, brief or long, in young or old. I am thinking of how you and I add to our education, now, in any effort of the kind that we may make, from striving to understand the meaning for us of a novel we are reading, to the pursuit, perhaps under guidance of a university, of some course of lectures or discussions. As Whitehead sees a cycle, I, too, see a cycle; indeed, it is probably he who caused me to see it. I see a movement of the mind that begins as a free reaching outward, impelled by curiosity, wonder, excitement. I see the mind next pass through a sort of contest, a conversation of alternatives or between this event and that idea, in difficult and fruitful interaction. And then, if education happens, there is a third phase of the cycle in which the new fact or idea or experience is made a part of me; I act, internally, with regard to it. In the rest of the present lecture I shall speak of the first phase; the second and third phases provide the topics for the other lectures of the series.

Education arises out of the universal impulse to explore the world around us. Aristotle wrote that philosophy begins in wonder. He might have added—perhaps he did—that so does education. One may receive training by merely adjusting to the expectation of the teacher, but one cannot become educated without a sense of wonder at what no teacher is quite prepared to explain. There are glimpses of significance that stir mind and soul together; these are what make education possible.

Of course one is not educated by just wondering. A zestful feeling about the universe, with nothing added, may yield, at best, a vague happiness. Education requires much more: a respect for reason and the hard and troublesome use of it. Nevertheless, in considering first the disposition to explore, I attend to a necessary precondition of the educational experience.

In children the impulse to explore, to wonder, is very powerful. Many a reminiscence connects some childhood stirring of the imagination with later development. Maurois recalls the poems read to him by his mother when he was very young. He asked for certain of these poems, one about a bugler sounding the charge and a fair-haired youth of seventeen. Many years later he writes, "Perhaps these poems were very bad; I do not want to know and I have never reread them; they gave me my first literary emotions. I could not hear them without weeping. But . . . they were sweet and comforting tears and I think they made me better." The English contemporary novelist, Joyce Cary, writes of a small child—perhaps himself—seeing an amateur performance of *The Tempest*. In retrospect, he was completely astonished and his sensations were so new that he had no comparison for them; they were experiences of a new kind. The impact of the words, "Hang, cur, hang, you whoreson, insolent noisemaker," he felt

> as a real insult; they gave me a shock of delight and anxiety. I looked anxiously at the boatswain to see how he could take them, and when I saw that he did not answer at all but simply went on shouting orders to the crew, I felt a deep admiration and sense of discovery. That's the right way to behave, I felt; I thrilled to the wise boatswain, brave and independent.

He goes on to say that, except for a few lines, he could later repeat nothing of the play, but

> thousands of musical phrases, of half-understood images, had fallen upon my senses enriching them as if by three or four years of ordinary seasonal falls, flower, harvest, leaf and snow, so that I felt dizzy with the weight of experience . . . Words like beauty, death, love, took living form and sang in my head like angels.

This, Cary recalls, is the child's exploration.

It is difficult to suppress the sense of wonder in children. Even when we try to do so, it bursts forth. Edmund Gosse's puritanical mother forbade him to read any fiction. At the bottom of an old trunk he found fragments of a sensational novel. It filled him with delicious fears. Denied even a visit to the zoo, I suppose lest it stir his mind to evil thoughts, the child invented a private world of strange beliefs in which he could make the butterflies in his father's natural histories come alive, or send himself, during morning prayers, up to a cornice from there to gaze down upon his other self.

For a long time now the books that adults have produced to be used in teaching children have on the whole done what they could to discourage this essential exploration and wonder. I read in a letter he wrote Coleridge that Charles Lamb deplored the dull and formal knowledge of schoolbooks of his day which failed, he wrote, to stimulate "that beautiful interest in wild tales which made the child a man." The primers of today are still decorous and dull, as John Hersey and his neighbors found in their study this year of reading in their local schools. Tests may show that children learn to pass reading tests as well as ever, but is there important improvement in encouraging the beautiful interest in wild tales? There seems to be some doubt as to whether children's programs on radio and television have this effect. There is evidence that some children are overstimulated to nervousness or to delinquency by the sensational in comics or in television. It may be, nevertheless, that the greater evil is that they are not stimulated enough. What I am told by the very young suggests that the differences between one cowboy and another or one space-man and another are not remarkable; they do not send the mind into great experience and discovery. Perhaps they chiefly prepare the young for absorbing the adult equivalent of these productions—the bland and undemanding stories of the weekly supplements, the digests, and the untroubling flow of oddments in back pages of the newspaper.

It is the adult, not the child, however, who must look to his sense of wonder. It is a sense that languishes in later life. Education begins in wonder and ends in routine. In Guatemala I was struck with the freshness and alertness of the Indian children as compared with the closed, finished, undemanding mental qualities of the

grown men and women. In Chicago I often have the same experience. Yet here, at least, an occasional child becomes an interesting and educated adult. The pressures to conformity, everywhere, are hard on the sense of wonder. In primitive society they are pressures to understand a few things, as others understand them, very well. In civilized society they require that each understand a little about more things, as the people immediately around one do. The former conformation produces individuals who are deep in a very small world; the latter produces individuals floating about on the top of a very large one.

Not many adults maintain the sense of wonder. Some do in connection with the work they care most about. One of our distinguished biologists, Professor Curt Stern, in his Sigma Xi National Lecture this year, told us that after twenty-five years of looking at the little fruit fly, *Drosophila*, each time he finds fresh delight. He marvels "at the clear-cut form of the head with red eyes, the antennae, the elaborate mouth-parts; at the arch of the sturdy thorax bearing a pair of beautifully iridescent, transparent wings." He is particularly delighted by the bristles: "With surrealistic clarity the dark colored bristles and hairs project from the light brownish surface of the animal, delicate and stiff, in rigid symmetry." He finds this view fascinating and compares it, in interesting contrast, to the glow of a young skin in a human being. Now this is a persistence of the sense of wonder and delight that we can envy. With this to sustain him, it is no wonder that Professor Stern is finding out important things about the nature of life.

Perhaps a sense of wonder, a disposition to explore, is just a gift. Some men do exercise the gift. G. K. Chesterton did. He persistently looked at the world through his legs, with astonishing and valuable results. I cannot tell you how to preserve and cultivate the imagination. It will probably continue to develop if you find some enigma, great or small, and keep working toward understanding of it. You may find it in the workings of machines, or, better, of men. A good book published not long ago, titled *The True Believer*, is about a rigid and fanatical kind of mind that is at the moment making trouble for our world. It was written by a longshoreman in his spare time. He persisted in exploring: he struggled with the ideas that came out of the human nature he explored.

Adults are not confined to an imposed curriculum. If habit quiets the sense of wonder, on the other hand the opportunities for education widen as does experience in later life. We may explore tools, fields and woods, people, events, difficulties, and possibilities. Everywhere there is something in which to discover beauty and truth, appreciation and understanding, poetry and science. The hindrances to education are enormous; the helps no less surprising. Out of the radio and the phonograph disc came an unpredictable development in American musical taste. Now, we find a fresh field of educational exploration in, of all places, the drugstore. The shelves holding the cheap paper-bound books are a major project in adult education. Included are some of the very best books ever written and also not quite the worst. To order them in worthiness, with good reasons, would educate anybody.

I agree with the assertion (by Robert M. Hutchins) that "the prime object of education is to know . . . the goods in their order." The heart of the educational experience is to distinguish the better from the worse. This is true, whether the good is sought in books, music, politics, or men. Education is a struggle to build one's self by making clear one's own order among goods. That which is most appropriate to human beings is the sense of value. It is, as Whitehead says, "the ultimate motive power." It "imposes on life incredible labours, and apart from it, life sinks back into the passivity of its lower types." Education is improvement in judgment about values. We can take the world as we find it and accept that lower passivity. Or we can undertake the labors and pursue an education.

As we explore the order among goods, how do we know that it is a better good to which we come? There is no proof that will satisfy every seeker. There is no argument that will satisfy everyone that the pursuit of order among goods brings the seeker to the better, not the worse. There are many who have no zest for the search, because they say each order of goods is special to him who holds it, or to the tribe or nation from which he takes his directions of search. Yet simple things may be said that have weight with him who thinks, as I do, that it is at least true that some order of goods is discoverable by education.

There is the evidence of one's own private convictions: one makes judgments on one's own success in discovering better books

or music. There is at least the feeling that in the course of education one has clarified the judgments which, for instance, condemn the demagogue and approve the democrat.

There is, too, the evidence provided by the sequence usual in the development of the human beings around me. The boy collects marbles or pictures of baseball players, then perhaps seeks understanding of machinery, and if he ever seeks understanding of morals and of art, he does so when more fully grown. To pursue the goods in the reverse order would not seem to us educational. It would be climbing down a ladder when you want to go up. If one remains throughout life with the marbles and the ball players, education is clearly arrested.

In every part of the world, among savages or civilized people, men and women postpone some immediate and material satisfactions for some remote moral or spiritual ends. In this, all cultures are alike. All peoples distinguish the desired from the desirable: everywhere there is an order of goods that can be explored and be more fully understood. In the more civilized societies these orders of goods come to be examined, criticized, and refined. In both the West and the Orient they are in part expressed in the form of a series of progressive stages in a man's life: in both parts of the world one is urged to conduct one's self so as to grow in wisdom and so as to leave less worthy things for nobler. Adult education has justification in every system of thought.

The differences of judgment as to what is better and what is worse, as between one man and another, or one tribe or nation and another, are of course great. But they are not unlimited. Those who compare the customs of mankind are nowadays more and more inclined, I think, to recognize the wide and general similarities among the orderings of values that have been reached by peoples in all parts of the world. For instance, capricious violence against a person of one's intimate group is everywhere regarded as an evil; very generally loyalty, hospitality, and courage of some kinds receive positive evaluation. And certain broad trends of development have occurred in men's ideas of good and evil: the condemnation of slavery; the rising, widening recognition of human dignity and individual growth. The judgment that Hitler had the wrong order of goods is not likely to be reversed; and it is at least

an open question if his victory by arms would have much delayed that verdict. Very few people who have given up cannibalism return to the practice, and when torture is re-introduced in modern times, the practice is, after the event, even by the torturers more often deplored than admired.

If one seeks education as an effort to seek excellence, in work and play, in art and in ethics, one thereby widens the circle of those whose judgments as to these matters may support or may test his own. Education multiplies the minds in communication with our own. Alone we are not; we may find him who shares our struggle to judge well our present ordering of values almost anywhere—next door, across the world, or speaking to us from the past out of a book.

None of these considerations may keep this man or that from throwing up the whole business as too uncertain. Why seek so indeterminate an order of goods? Nevertheless, the simple observations I have just made set forth the fact that on the whole the human race has kept at it. I am one of many today who neither seek nor hope to find a source of authority for ultimate judgments as to the good. I think each must struggle to find it for himself. I am sure that you and I shall never agree on the same detailed order of goods among many things. And if one says that there is an order of goods that is true for all men, there is another who says it is not so. For the pursuit of education I do not see that it is necessary that either view prevail. I think it will be generally admitted that all human beings recognize some hierarchy of values, and that those who recognize education as an organized activity see its desired course as a movement up the hierarchy. Education will serve either to discover value in the universe or to create it. Education is to make the soul grow.

In this lecture I have talked only of the first surge of the mind in which the educational experience begins. Alone, this movement outward does not assure growth in understanding of excellence. The surge may simply ebb again, the gleam die, the interest sink to nothing, or become no more than excitement and pleasurable sensations. To understand fully the nature of education we should have to go on to see what next the mind does as it educates itself; how alternative considerations, or facts and ideas difficult to relate to

each other, are taken up in a disciplined struggle. We should go on also to examine the outcome of this struggle in the improved understanding and discrimination achieved by the learner, so that what is learned is thereby added to the learner, changing, and by that much, however little, improving him. We should be talking about the entire cycle of effort and achievement which is the educational experience.

The surge outward is, however, an indispensable beginning. How free are we nowadays to take advantage of it if it occurs? We may look about us to see if minds are ready and willing and unrestrained to look into the remarkable universe. We may ask ourselves if ideas are freely entertained in America, in our local communities. Are we encouraged to pursue adventures of the mind? Are we restrained from pursuing those adventures in certain directions? The possibilities of educating ourselves are as wide as the climate of freedom allows. I think it must be admitted that in recent years the climate has taken a turn for the worse. In this period of fear and danger, the ceiling of permitted visibility has, I think, somewhat closed down. We are discouraged from looking in certain directions. We Americans, free as we are in comparison with many millions of other men, are far from perfectly free to undertake adventures of the mind. This is the year in which many teachers admit that they avoid talking about subjects that might get them into trouble, in which books have been taken from public shelves because the opinions of the writers are suspect, in which takers of public opinion polls report a growing reluctance of citizens to express their views on many a public issue. We just do not want to get into trouble, and trouble can come from expression of an opinion or an idea. These are times when heresy, once a matter of religious doctrine, has been seen to arise again, now in connection with political orthodoxy. Safety is to be found in the middle of the road of thought, and if the mind moves too far in that direction that is by people seen not merely as leftward but also as sinister, one is in danger. Reputations and careers are threatened or destroyed by the fact that one once had opinions over in that direction, or even that one consorted with others who had them. Advisors to the government are excluded from counsels of public policy chiefly because they were once wrong, or because their opinions on some issues

coincided, but for quite other reasons, with the views of Communists. Many a man finds himself in some situation of action or employment or mere uneasy association with his fellow workers or neighbors in which he is not free to explore such questions as world government, or the employment of Communists, or the ideas of Karl Marx, or even simple political issues of the moment. Speakers with opinions unpopular to local minorities are denied a hall in which to speak; discussions of the United Nations in public schools come under criticism and are restrained or suspended.

This is the year in which a bill was introduced in Congress that would deny mailing privileges for publications and films which contain material that "explicitly or by implication favors the political, economic, international, and governmental doctrines of Communism or other totalitarian government." This is the year in which four American colleges refused to allow their students to debate the question whether American diplomatic recognition should be given the Chinese Communist government. As the Japanese in the days of their authoritarian rule forbade the publication or utterance of ideas that were "dangerous thought," so now we avoid or even forbid anything that is "controversial." Forgetting that the United States of America could not have come into existence without controversy, and that controversy, ruled by reason, is the very breath of American life, we now make the mere participation of a citizen in discussion or advocacy of a politically sensitive issue a cause for putting him aside. In many places we do not trust ourselves to reach wise judgments by free and open discussion of issues. Even the special committee of the Atomic Energy Commission in reviewing the Oppenheimer case, reported to the American people that the regulations under which they worked prevented them from the exercise of a mature practical judgment. In all these events we see a growing disposition to curb the minds of Americans, to prevent ourselves from using imagination and intelligence to reach answers.

It appears, then, that if the surge of the mind to explore even the unpopular and the dangerous idea is subject to restraints, the effort to do so is not only a contribution to one's own education, but an effort on behalf of the freedom of us all. Freedom and education depend on a common principle: that as the mind grows it may dare any idea, try out every speculation, consider every issue, so that

reason and fact sort the better from the worse and bring us a step nearer truth. We are as free as we allow ourselves to be. No, we are as free as we allow others to be. If I deny the right of my fellow citizen to debate such an issue of real importance to us all as the political recognition of Communist China, or to discuss with entire openness of mind the worth of what Marx wrote, I am in effect limiting my own liberty. For we are committed to the making of a society through intelligent and informed opinion. The policing of ideas is abhorrent to our principles. Education can go forward if we keep ourselves free to explore and to test ideas. Education is both the exercise and the defense of freedom.

# 2

# Conversation

*Second lecture, delivered in Santa Barbara, California,*
*December 7, 1954*

THE experience that results in education is a successful adventure with difficulties on the way. Impelled by the wonder and puzzle of things, the mind and spirit start out toward destinations not clearly seen. But soon the way is temporarily blocked. Across it lie ideas, facts, possibilities, and implications that demand to be dealt with before the traveler may go on. There is a period of struggle, mixed of pain and joy. The struggle is a give-and-take; this confronts that, a position is corrected by another position. There seem to be two sides, or more, to the engagement. But the outcome, if it be education, is not so much destruction as creation. That which lay across the path has made the traveler grow, and he proceeds, now taller than he was.

This metaphor suggests the movement of the mind in the education of child or man. The three parts of the tale fit the three lectures of this series. In the first I spoke of the outward impulse to explore. In this one I consider the struggle on the road. The growth that results is my subject in the third.

The struggle on the road is the effort to make sense of an idea or a fact that makes difficulties or opens possibilities for a view of things that has already entered the mind. So the struggle is a talking back and forth. It is not a contest in which A tries to destroy B; it is a conversation in which A and B each speaks for himself while attending to the other. The struggle arises in the traveler's mind: how is this B to be taken into account, to be arranged with reference to A? We are educated through conversational struggles in which nobody loses.

"The Socratic dialogue is the mirror of pedagogy," writes Robert Hutchins. Is this true?

It is said as to education, not as to learning. One learns some things by sitting down and memorizing them. The combinations of the multiplication table are best learned not by discussing their merits, but by repetition and the formation of habitual associations. In learning much grammar, some elements of geography and chronology, and many other things, conversation would be merely troublesome. Some things are best learned without debate; these are the tools of the mind. They are acquired by training; they are not education but are important means thereto. Such things, once learned, are "put out of the mind."

On the other side, in qualification of the importance of dialogue, it is to be recognized that some understandings come to us swiftly and directly, without explicit discussion. In reading a history or a biography, an insight may appear within the mind as an instantaneous apparition. A vision is vouchsafed; a significance is grasped. We have no rules for assuring the discovery of order in the universe. The great insights of scientist and artist alike come unpredictably, capriciously. So it is with the course of ordinary understanding. Exploration and creation may seem to come one immediately on the other.

Nevertheless, it is in arranging for conversations that there is possibility of education as an organized effort. The truth of Mr.

Hutchins' statement is its recognition of the importance of deliberate and guided discussion for making mind and spirit grow. "Teaching, like midwifery," he adds, "is a cooperative art."

The Socratic dialogue is not so much a mirror of education as it is a model (as Hutchins, indeed, elsewhere calls it). There are many educational conversations that do not rise so high. People with little to guide them enter into exchanges of views that move their minds. I remember conversations between peasant women in a village in Yucatán; in one the topic of the dialogue was the nature of the soul; Doña Francisca set out the view that the soul is an immaterial something that gives life and personality and that at death passes to God. Doña Tereza identified the soul with the breath and argued that the cessation of breathing at death showed that the soul is no more than this. Neither woman could read or write. They were debating an ancient issue that had entered the tradition of their isolated village from sources they did not know. So too in many a dormitory and tavern the "bull-session" carries onward an education that began in a book or a lecture. Informal conversations are a growing edge of more formal educational arrangements. The *Euthyphro* and the *Phaedrus* are Plato's compositions; they do not transcribe *verbatim* what Socrates and others said. But they are models in two senses: they propose both a line of thought on principal questions and a form of reasonable exchange of ideas for the uses of education with respect to many other subjects.

In further explication of the educational dialogue, one must admit that people still attend lectures—even when not required to do so. One may occasionally have educational experiences in listening to lectures. Even Socrates often fell to lecturing. I suppose that if a lecture educates a listener at all, it is because there are conversations in it. As I listen, I may carry on a conversation with myself, considering and debating what the lecturer says. Often this takes place later. At breakfast next day there come to the mind the considerations that show the lecturer's position to be mistaken, or not mistaken. Or the lecture itself may take the form of a conversation, a report of a past dialectic into which the listener is drawn, as a lover of a sport or an art enters into the performance of the sport or art, imaginatively, as he watches. The teacher who educates us

is in many cases the one who stirs up unspoken dialectic in the pupil. André Maurois writes of one Alain, the teacher who most influenced him. Alain conducted classes in which there was no discussion; he did all the talking. But he taught by asking questions of each thinker whose work he discussed; moreover, he drew from each philosopher that aspect of his work which the others could not so well provide. The lecture was, I suppose, something of a symposium, a multiple dialogue moving to culmination.

Maurois grew up among educated people, read many books, and had very good teachers. The educational dialogue appears in very different form in the case of one Alexander Somerville, whose life and autobiography played a part in the history of the Reform movement in England. When a small boy, Somerville was an ignorant cowherd, with no reading, living in rural Scotland in the early part of the past century. His first education came to him in the person of an old blind man who walked, talking to himself, into the valley where the child watched the cows. The old man, his mind a little turned, yet retained vivid memory of many books of history he had read when he had eyesight. I tell the story in Somerville's words:

> On a stone at the foot of Ogle Burn . . . James Dawson used to sit down and call to Sir Walter Raleigh, Essex, Burleigh, and other courtiers to Elizabeth, to come to him, and when they came he sent them to fetch her majesty. He would then go into a political argument with them about Philip of Spain and the other personages and subjects of Elizabeth's reign. He would listen as if someone spoke into his ear, for their observations, and would interrupt them at times impatiently, if they did not seem to be holding a sound argument.

Then the old man would ask some shepherd or farmer he knew (who was of course not really present) what he thought of the issue under discussion, and then turn to the young cowherd for an expression of opinion. "Thus," wrote Somerville many years later, "did I first learn anything of the world which is laid before us in books—anything of countries beyond our own—anything of other ages and other classes of society."

There are, then, many kinds of educational dialogues. The dialectic of mental growth is organized or unorganized, led by a teacher or pursued among those equally prepared, carried on within

one's self, or exhibited in a lecture, a book, or a dramatic representation.

It is important to recognize that the conversations of education are not only those in which abstract idea confronts abstract idea, or opinion challenges opinion. There are also the dialogues in which it is the facts that speak, talking, as it were, with one another, or with the theory or other general conception which guides them and which they in turn affect.

Experimental science has its own dialectic. The hypothesis proposes a question; the experiment or the observation confounds or confirms it; or, more commonly, leads to putting the question in a new way. When we are not able to take part in this kind of conversation by direct experimentation and observation in the laboratory or in the natural world, we can at least retrace, in our own minds, the courses of these scientific conversations as they are presented to us in the records of experiment and observation. The history of genetics, for example, is a course of persistent, reasonable argument of fact and theoretical idea with one another. The question is asked, for example, whether in the course of the first cell division in the embryo the determinants of future particular structure are separated off, that which is appropriate to the part of the body to arise from the one cell going to that cell and that which is to govern the development of the part of the body to come from the other of the two cells going alone to that other cell. To answer this question Wilhelm Roux destroyed one of the two cells of the two-celled frog embryo, and only half an embryo developed. The question asked seems to have received an affirmative answer. But later Driesch performed a more refined experiment: he removed one of the two cells from physical contiguity to the other; and the remaining cell, entirely alone, developed into a complete frog. The argument has shown that the first tentative conclusion was wrong; the position of the cell destroyed by Roux next to that left undestroyed had something to do with the power of a cell to develop all or part of an organism. The first cell division, in this class of cases, does not separate the determinants of future particular structure.

And the dialectic of theory and experiment continues. You may find it illustrated in many a field of natural science. At one time a course in general education with regard to the natural sciences at

the University of Chicago made excellent use of the educational value of the dialectic of experiment and theory. The texts for the students were the scientific papers in which were reported the results of that long series of experiments that led up to our present understanding of the effects, interacting and complementary, of several hormones in regulating the normal balance, the homeostasis of carbohydrate metabolism. The scientific mind, beginning with the fact of the disease diabetes, constructed a dialogue of fact and theory that led to understanding and control of the disease.

Rarely it happens that to the good fortune of education a record is made of the movements of one man's mind in carrying on, within himself, the dialectic of science. Such a record is given us in Charles Darwin's *Journal* of his famous voyage on the "Beagle," when as a young man he spent the years 1832-35 as the naturalist member of a voyage of exploration and scientific observation in the South Atlantic and in the South Pacific. We have this *Journal*, in a later form after Darwin had re-arranged the record to bring together matters bearing on the same topic, and also in a form closely corresponding to his notebooks. Comparing these, one sees how his mind went while he was in the field and something of how it moved afterward. It is a record of a prolonged, private, and immensely productive conversation with the facts of the natural world. When it begins, the idea of natural selection was not at all present in Darwin's mind, and even the idea that species might come into existence by small progressive modification, rather than by instantaneous divine creation, was hardly conceived by him as possible. When the conversation is broken off by the ending of the *Journal*, the elements of idea for the theory of natural selection are almost all present, although not yet assembled.

Reading this *Journal*, one's mind is stretched and strengthened in following the course of Darwin's long conversation with the facts. So many curious and yet related facts struck into his mind. He notes the strength of a monkey's prehensile tail that supports the body's weight even after death. He feeds raw meat to a glowworm and observes how the insect applies to the meat with his tail a digestive juice. He is amazed by the hosts of anthropod species in Brazil: "the variety of species among the jumping spiders appears almost infinite," he writes. The reader begins to understand that

from hundreds of such observations there were forming in Darwin's mind two ideas of immense power: the idea of variation and the idea of adaptation. He sees a snake that has the form of a viper but bears on its tail an enlarged point that is struck against grass and brush with an effect like that accomplished by the rattles of the rattlesnake. The snake is intermediate between viper and rattlesnake. Darwin sees how every character has a tendency to vary by slow degrees. Might the variation go so far as to change one species into another?

In this mood of wondering and doubting Darwin continues his journey up into the Andes, where he is struck by the marked differences between the vegetation and the animals in the eastern valleys as compared with those of the other side. He sets down his judgment that this is no more remarkable than that animals and plants differ on opposite sides of a broad strait of a sea. But then he adds a curious footnote in which he apparently accepts the view that the distribution of animals, created as immutable species, has been affected by geological changes, but to which he adds a portentous sentence: "otherwise the changes might be superinduced by different circumstances in the two regions during a length of time.' So the facts talk to Darwin, and he replies, now with the expression of the possibility that species might be transformed into other species by the accumulation of small changes naturally induced over "a length of time." The facts are talking to Darwin because he listens to them, and his mind conceives the generalizations which their talk to him obscurely hints: that it is almost impossible to tell a species from a variety, that life-forms are closely adapted to their life-conditions, and that the evidences of slow variation of life-forms in response to the influences of life-conditions are all about him.

The conversation reaches its climax as Darwin explores that little cluster of tiny islets, the Galapagos, off the coast of Ecuador. Darwin is at once impressed by the fact that many of the species on these rocky islets are, as he calls them, "aboriginal creations, found nowhere else." "Yet their general form strongly partakes of an American character." Why should the creative force create species on the Galapagos that resemble but are not identical with those on the nearest mainland six hundred miles away? Why not create them to resemble, say, the species found in Africa? Darwin,

rewriting these passages of his *Journal*, puts this question in plain words and remarks that the animals of Galapagos resemble those of America, where the physical conditions are very different, more than they do the animals of the far-distant Cape Verde Islands, where the conditions are similar. The dialectic is rising to its resolution and conclusion: through variation and adaptation life-forms once the same as those then on the American continent became differentiated into new species and genera on Galapagos. The animals on the islets are like those of America because they and the animals of America are descended from common ancestors. What Darwin has still to add to this interaction of fact and idea is the conception, which he apparently found in Malthus, of the struggle for survival in an expanding population. And he is to test the theory of natural selection in many years of painstaking study of barnacles and other animals and plants.

Darwin's conversation with the facts is, in its quiet and unnoted way, a sort of *Euthyphro* of empirical science, a model of the dialogue of idea and specially investigated fact. In other fields of learning the dialogues from which we may learn take different forms. In the study of human beings in their many societies, primitive and civilized, we rarely find that particular fact and theoretical generalization are so closely and influentially interrelated as in the study of carbohydrate metabolism. It is true that experimental psychology does give us a dialectic of observation and hypothesis to tell us, among other things, how rats or people learn. But these dialogues do not reach into the complex realities of many people doing many things as they appear in tribes, cities, and whole personalities. Those talkers with the facts who begin by looking at the tribes, cities, or personalities develop a dialectic in which one vision of the whole offers itself to us for comparison with some other vision of the whole. Freud's way of explaining neuroses, dreams, the development of personality, mythology, and religion, is one more or less coherent vision of all of these things, seen as related to each other in one conceivable way. There is presented to us a conception of the human being as a creature of powerful inborn impulse, meeting early experience with transforming, even damaging, effect, and expressing in religion, art, and dreams the images of thwarted impulses. If we read the book *Folkways* by William

Graham Sumner, we are given a different vision of man; here he is seen as a mere creation of the tradition of his group, a mechanical product of custom, incapable of doing anything much to change his state of affairs. If we read recent anthropology, still a third vision, also fact-connected, arises. The human being that is now shown us is not thwarted; he is freed, so it seems, by the customs around him; they fill his material and spiritual wants; they offer him those explanations of suffering, death, good and evil that make existence and a degree of happiness possible. To seek to understand any one of these viewpoints of man's nature thoroughly is an educational adventure. To consider, thoughtfully and returning always to the facts about men's behavior and institutions, how two or more such viewpoints differ from or resemble one another is to take active part in this other kind of dialogue. It is a dialogue in which we wait until one speaker has told us at great length his view of things, and then listen to another speaker with another view, while we hold in mind the facts and arguments of the first speaker. In this kind of dialogue the argument does not move from point to point, leaving behind disproved hypotheses. Rather we see a subject matter illuminated from different points of view as first one light, from one angle, is turned upon it, and then another. We feel ourselves a long way from resolving the differences between the visions or theories. For the time, we learn by trying out each whole conception on more particular fact. Two or three conceptions contribute to an improved understanding; no one is put entirely away.

The conversations of learning and education are various, according to the nature of the relation between the general idea and the particular fact. I suppose it would be possible to conduct a highly educational conversation about the many explanations that historians have offered for the fall of Rome. We would not, at the end, decide how Rome fell. But we might stretch our minds. Another conversation would review the same work of literary art, guided by the several kinds of questions asked of it by different literary critics. A series of Supreme Court decisions interpreting the equal protection clause of the Fourteenth Amendment with regard to racially segregated schooling offers a basis for another kind of educational conversation.

A conversation in some form is an indispensable part of that

education which makes mind and spirit grow. One may learn truth as somebody else has thought it without the troubles of argument. But to develop the power and responsibility which are the pleasure and the burden of educated men in a free society, one has to struggle with idea and fact. It is much easier not to. In certain isolated universities of North Africa the principal qualities required of students are attention and memory; no attempt is made to train their critical powers and their judgment; they are in school to learn the Truth and not to think for themselves. So these students learn texts by heart and never participate in lecture or discussion. Nor do they ever, we are told by Professor Le Tourneau, take any part in their country's political life.

To take useful part in public decisions is to seek understanding through a struggle of alternatives. In America, too, it is sometimes found easier not to struggle. In some of our schools and colleges rote learning is less formally taught than in Africa. In many courses the student reads a textbook in which things are asserted about something without any invitation to argument. The paragraphs are short, brightly written, and conveniently captioned. Perhaps the instructor wrote the textbook. Then we have a monologue repeated. The long, difficult, strange, and beautiful dialogues of idea and fact that led up to that book are quite hidden beneath its bland and easy surface. Let us rejoice that in leaving school we may escape from such books. They contain no visions to stir the explorative spirit. They provide no line of disputation on which we may exercise our critical faculties. "What is the use," asked Alice, just before she fell down the rabbit-hole, "of a book without pictures or conversations?"

As adults we may choose from many recorded conversations in arranging, for our own education, the conditions for carrying on our own further conversations. We bring to the enterprise the experiences we have had in work or in play. We are freer than are children to choose the approach congenial to our special nature. One may relate his ideas closely to action, as that one knows action in factory or politics or profession. Another may consider the topic philosophically, for general ideas and aesthetic appreciation. A third is more interested in the methods for observing natural phenomena and for drawing general descriptions from the observa-

tions. Whitehead says (in the fourth chapter of *The Aims of Education*) with respect to technical, liberal, and cultural education that each should contain the others. I agree; and we may choose that beginning that suits us. But the technical and the liberal are not equals in education; the great end is the growth of the self, the effort to know, with reason and knowledge, the goods in their order, and the technical is educational only as means to that end.

Among the difficulties of carrying on such a conversation in America today is the prevalent separation of work and play. Stated roughly, business is troublesome activity without reference to the works of the mind and spirit, and play is ceasing that troublesome activity without reference to the works of the mind and spirit. Relaxation, the ceasing to be troubled, is a good and necessary thing. But it is not education, which is effortful and goal-directed. When education is taking place in a grown person, we probably find that for him the distinction between work and play begins to disappear. The work tends to be related, in his mind, to the ideas and facts which he is pursuing, and instead of merely relaxing, all the time when he is away from his work, he finds pleasure from time to time in pursuing the same ideas and facts. A program of adult education in which the participants think only of what they read on the fortnightly occasions when they meet to discuss it has serious limitations. It may turn out to be more recreational than educational. Effective educational conversations are carried on, intermittently but persistently, as one argues with one's self while apparently cooking dinner or shaving. It takes a series of many little efforts to advance education. Yet relaxation has its part in education too. For the mind to grow, it must struggle, and then must abstain from struggle. "So now you must labour with your brains, and now you must forbear your activity, and see what the great Soul sheweth," wrote Emerson.

Perhaps the most serious difficulty in the way of conducting conversations that are educational is the confusing, the almost shattering, influence of most of the talk around us. As extremes, we have on the one hand Plato and Darwin, on the other the calumny and vituperation of much current public utterance. In between and all around are other kinds of speech quite distinct from the dialogue that is educational: the empty and plausible oration, the preten-

tious, ugly, and muddy language of many a so-called scientific paper or official document, the sleazy words of ephemeral light fiction, and the bright and completely false-sounding utterances of those who would have us buy something they have to sell. What a chorus of bad example! The heaviest price we have to pay for that incalculable good, freedom of speech, is listening to the uses to which the freedom is put.

Each kind of talk has its purposes and its implied rules. I may talk to express myself; then it matters only that I am occasionally allowed to do so; a sympathetic listener increases my pleasure but does not assure a dialogue. A social conversation has only the simple rules of common decency: that each speak; that nothing too distressing be said; and that obedience be given to whatever conventions are special to the occasion. At a large cocktail party a quite successful conversation can be carried on by merely repeating the same bit of utter nonsense, and I believe that the experiment has been tried. Where the end is pleasure, the rules are simple. Where speech is used to bring about a sale, or in diplomacy to allay fear or mislead an opponent, or in ruthless politics to terrorize a victim, there are other rules or none at all.

The educational dialogue, Socratic or otherwise, differs from all these other kinds of utterance in its ends and in its rules. The rules are those appropriate to mutual enlightenment, to growth for all participants. There is first of all the recognition by all participants that the end is insight and understanding. So what is said is taken seriously. Light as the touch may be—and in learning humor is very welcome—in conversing for education there is the sense of the significance of what is said. I speak, or I listen, because the speaker means what he says, and believes it a contribution, however small, to the effort up the ladder of important understanding. So the utterances that move toward education are vitiated by insincerity and diminished by triviality or mere show of personal skill.

In the next place we may recognize the educational dialogue by the fact that it is truly a dialogue. The duty to appear at least to listen in the social conversation is replaced by the duty in fact to listen. No serious conversation takes place unless first I speak to one who attends to what I say for the dominant purpose of understanding it, and unless then I listen, seeking understanding, while

he speaks with the same purpose. One may be silent in a circle of friends, or in a discussion of a book, and yet learn from the discussion of others. But then I carry on within myself an unspoken conversation in the same spirit and with the same rules as prevail in the spoken discussion. When the new idea entering my mind meets a difficulty or a conflicting view or fact, I talk, internally, for one side and then for the other of the possibilities I may begin to see for dealing with the view or the fact. To make reading educational I give the writer every chance to tell me what he is saying. And it is not yet fully educational unless then I meet what he says with my own idea, or the idea or experience of another, and make the effort of seeing what comes of trying to entertain both or first one and then the other.

There is a balance, which the scientist, the scholar, the judge, and the wise leader all know, between the personal and the impersonal in the educational conversation. To be wholly closed within one's self is, obviously, to make education impossible. But to attack the educational experience with the complete impersonality of a machine, even if this were possible, would be equally defeating. One gives of one's self in conversing for understanding. One commits one's self to positions. One says, "Yes, just now, so far as reason and experience tell me, this is what I stand for; I will risk myself on this until shown something better." And to this position one adds whatever support comes from one's own life, personal as it of course is. Yet, on the other hand, the end, understanding, is not mine alone; it is shared with others. These others and I are communicating about a something impersonal, a something which, though expressed in some small part by the experience and insight of each, is above us both. Its names are many: common sense, truth, wisdom, the right. In Michael Polanyi's fine phrase, the effort to understand is made "with universal intent." The speaking in an educational dialogue is personal but disinterested, self-committing and self-transcending.

So we see that the educational dialogue calls for a large measure of good will. It begins in an act of faith: the assumption that those who converse speak in honesty, for the purpose of reaching understanding, and with generosity toward each other. The liar and the malicious speaker at once disqualify themselves, but the conversa-

tion begins with the assumption that they are not present. Such a dialogue flows on mutual respect. In certain kinds of utterance, as in legislative bodies and in debates, formal rules keep the talk going even when, between particular individuals, the respect is lost. In talking with friends to reach understanding, we do not need the formal rules. In talking, silently, with a book, we need the habit of mind which attends to what is said to us with friendly receptivity and yet with suspended judgment.

The educational dialogue requires balance also between assent and denial, agreement and disagreement. Needed is a certain willingness of the mind to reach out to that which is not yet understood, even to that which at first repels one. Those who only show the other wrong do not learn. Alain, the teacher whom André Maurois so much admired, said that "refutation is a dull game." Simple refutation is rarely educational. On the other hand, if one's agreement with the idea comes too easily, it may come before it has met the tests of judgment. If the new idea is a good one, it will be strengthened by doubt and restatement. There are people whose first approach to a new idea is negative. There are others in whom affirmation prevails. But there are only two dispositions of the mind that allow it to grow: one may say neither, "Yes, Yes," nor, "No, No"; one must say either, "Yes, but—," or else, "No—and yet—."

In this series of lectures last year, Lyman Bryson said that we are embarked in the United States on the attempt to build a civilization in which as many as possible of our problems will be solved by each of us using what he has of the power to think. Often it does not seem that we are actually doing this, but of course Mr. Bryson is right; this is our purpose; and this is why universal education and democracy go together. We want not only government by the people; we want government by a people who make the effort to think.

No one citizen can think about everything. No one of us can form considered judgments as to the thousand problems of our common life that one day's issue of the *New York Times* brings to our notice. But there is something that we can all do; we can come to recognize a reasonable discussion when we hear it. We can, through practice of the dialogue in our own unending education, come to distinguish that man in public life who takes up problems

with disinterested consideration of the alternatives, guided by reason and fact, from that man who is just talking for effect. We can support the one and reject the other. The former is carrying on intelligent conversation with universal intent. We can trust him. The latter we cannot trust; he may be a knave, a blatherskite, or a fool.

A representative democracy, in a world grown so complex as this one, depends, at the least, on common understandings as to the rules of reaching decisions. It cannot depend on common understandings as to what ought to be done about every particular matter. It cannot depend, safely, on trusting only the objectives of its representatives. The ends of our common life are inseparable from the means we use to get there. We want freedom and government by the people. We can get it by supporting men who themselves think with universal intent, and who respect the power of the people to do so also. If we support men in public life who offer to reach ends we seek by means opposed to those ends, we will get what the supporters of Hitler and Stalin got.

The implied rules of the educational conversation are both intellectual and moral. They say, "Use reason," and they say, "Be fair and generous." They are a commitment of faith in man's rational nature and his power to develop it. This morality of the educational conversation is also the ideal of public life in a democracy. Its application in public life gives courage to those who strive to improve education. Its exercise in education strengthens its practice in public life. An autocratic teacher, an instruction which does not accord respect to the intelligence and to the person, even a thoroughly dull school or course of instruction—these are not merely bad education, they are in conflict with our democratic principles. But where the conversations of organized education are conducted under the rules just described, there is preparation for citizenship in the kind of society we want ours to be.

The fearfulness that infects us today is bad for freedom and bad for education. We cease to trust the power of our minds to deal with problems in fair and intelligent discussion. High-minded speech is often platitudinous or evasive; we cannot accord full respect even to those whose intentions are fully honorable. They have failed to exercise the educational dialogue. And much other speech

is irresponsible or downright malicious. Those who speak in malice and self-interest corrupt the reasonable dialogue and inure us, I fear, to lying and deceit. We are intimidated, or at least dazed. The effort to keep the public conversation going in this time of troubles becomes too heavy a burden. We accept the suspension of some of the freedoms of honest conversation on which a healthy common life is based. We are encouraged secretly to report on the activities and thoughts of our neighbors. We hesitate to commit ourselves to positions lest our own sincere utterances prevent us from serving our country at home or abroad. We exclude from the councils of the nation experts because, it appears, we fear they may give us honest advice that later on we might come to think mistaken. Speaking for American scientists, Vannevar Bush has written that in the administration of security regulations the scientists "see only slightly concealed an inclination to exclude anyone who does not conform completely to the judgment of those who in one way or another have acquired authority," and asks "whether we are treading the path that will lead us into the fallacies of totalitarianism." These words are his, not mine.

Yet the American ideal of public intercourse remains what it has always been: the reasonable conversation. It can be restored and strengthened here at home. It can be extended to the international community. The Voice of America may yet become an educational conversation of the world's peoples. We can show an example by talking rationally and by stopping to listen to what other peoples have to say to us. Just because it is too difficult just now to carry on a conversation with Russia is no reason to abandon the attempt to converse with India or Iran. It is not a reasonable conversation to shout our virtues at them through a transmitter. It is not a reasonable conversation to assume that they will buy our way of life as if it were a superior-model automobile, and then talk fast about our model. A world of democratic peoples is possible if peoples talk to peoples reasonably, and conversationally, attending to what each has to say in thoughtful respect for the other's views.

An ideal is a picture of the place you will never quite, but always strive to, reach. Its attainment happens in little pieces of the striving. We shall never have a world of perfectly rational and fair-minded men, just as we shall never have an educational system in

which everyone learns to think with the excellences of intellectual conversation that I have imagined. But the great good is contained within the small; the civilization of the dialogue is set forth, however humbly, in any one small piece of honest intellectual exchange, with my neighbor, with my book. A new beginning toward the unattainable is forever right at hand.

# 3

# Creation

*Third lecture, delivered in Los Angeles, California*
*December 8, 1954*
*(also in Berkeley, California, December 2, 1954)*

EDUCATION is of course learning something. More importantly, it is becoming something. Although knowledge is needed for education, an educated person is not the same as a man who has knowledge. An educated person is one who is at work on his enlargement. If we learn things that become parts of us, if we make efforts to develop our own particular understanding of life and of the order of life's goods, it is education we are doing. A person is something that it takes time to make; there is on everyone an invisible sign, "Work in progress"; and the considered effort to get along with the work is education.

Thought of in this way, education is not as common as one might suppose. The institutions that we call "educational" are engaged

only now and then in the development, in children and young people, of understanding of the order of life's goods. Schools and universities provide care of the young, offer recreation and pleasant associations, teach many useful skills from reading and writing to surgery and the preparation of legal briefs, and occasionally, desirably, indispensably educate.

So much of life goes just to keep things running, to police action, to bolstering the dikes against catastrophe. In our national life we have small freedom to decide how to spend the income of our immense national wealth. Most of it is firmly committed to paying for past wars and to trying to protect ourselves from or in future wars. In the schools we have got ourselves into a situation where we have only limited freedom to educate. You will see a schoolroom with fifty children and one teacher; the teacher uses most of her energies in keeping some kind of order. In a high school or college, also, much that goes on is merely custodial. Part of the budget goes to keeping the young people out of trouble and reasonably happy. If parents feel sure that this much is being accomplished, they are thankful and content.

If an occasional adult turns to the task of making himself grow in understanding of the order of life's goods by way of books and reasonable discussion, he meets a world and often a neighborhood that are unfavorable to his effort. Time and the will for education are in short supply. There are the pressures of immediate circumstance; there are work, entertainment, and the enjoyment of life in other ways. There are the innumerable problems of personal and public life. Many people today are passive or pessimistic; the tone of much public life is harsh and threatening; the danger of war by indiscriminate slaughter continues.

Nor is there much encouragement for education by adults, of themselves, in the examples and expectations that we encounter in our communities. What appears in most current print or broadcasting is for the most part irrelevant or ignoble. And one's neighbors are not likely to expect one to start work on one's own development through the pursuit of learning. Education, being a growth of the self, is in nature endless and hardly begins in the schools, but there is a widespread mistaken idea that all that sort of thing is over in school and college. Thoughtful people, who read

a good many books, are today sometimes looked upon as a little queer, possibly as dangerous. The pursuit of learning by grown men and women is not very popular.

I state these difficulties so that we may take them into account in judging the worth of what I say here about what education is and how it goes on in men and women. No doubt I have overemphasized them. To the peasant of India wanting to learn just to read and write, America is vastly fortunate. Compared with other peoples, we are blessed with unusual material provision for such education as we may want to undertake. Where else is the working day so short? Where else have people such means to enjoy books, travel, and time to think?

In the very general sense of becoming something, everybody gets educated; everybody becomes something in the course of his life. The questions are, How good or bad a something? And, who decides what I become?

To meet the necessity of becoming something or other as one grows up and grows old, there are at least four distinguishable possibilities. The first way is no longer open to us; it was the way in which, in primitive societies, education was brought about merely through living the expected life. Taught by the example and the simple instruction of those around him, the American Indian or the African tribesman arrived at such wisdom as he needed in his well-integrated and largely stable world.

The other three ways are open to us in these later and more difficult times. Each is called "education" by those who approve of that way of making people.

One can become what a dictatorial authority decides that one should become. This is education in a Nazi or Communist state; it has had its full demonstration in George Orwell's book, *Nineteen Eighty-Four*. In such a making of people, the choice of what to make is taken away from each individual, and the sense of freedom, so far as it exists, comes from identification with the nation, or the race, or some principle of history. Just now we are struggling both against the Communist way of making people and also against the rise of the same tendency among ourselves to take this way of becoming. We are submitting to this tendency when in response to a demand from some indignant faction we exclude

favorable mention of the United Nations from a schoolbook, or when we become afraid to study the writings of Karl Marx. This struggle on two fronts is noise and bitterness rather than thought; it is one of the difficulties that today impede any effort to make one's self as one wants to be.

A second way of meeting the necessity to become something or other is to become whatever at that time the people living around one are, changing to something a little different as people around one change. This, on the whole, is what many of us in this country do. It is sometimes called "adjustment" or "adaptation" or "socialization." This method, like the preceding one, leaves most of the work to others with a result that one is moderately comfortable and fairly acceptable to those who made one what one is.

In this country we will not choose the first of these ways and will defend ourselves against both foreign and domestic antagonists from having it imposed upon us. The lesser danger and the harder to avoid is the second way of becoming something. It will take some little thought and effort to avoid becoming the chameleon of the world's peoples, the easy adjuster to the immediate expectations of the suburbs or the neighborhoods in which we live, creatures whose characters are in their skins, not in their selves.

The third available way of bringing about the making of one's self avoids both dangers. It is the path I imagine us to choose in so far as we turn our interests and energies to our own education, as grown men and women. It is to take charge of one's own education, to put work into it along lines of one's own choice, and so produce something of a self-built self. This is in fact occasionally accomplished. It is a way open to anyone who wishes to give himself a good deal of interesting trouble.

For one who takes this responsibility, the experience that is education comes to be recognized, as it occurs within one's self or as one sees it occur in another. Education is to be distinguished from such other experiences as excitement, pleasure, and having an opinion. I have ventured to identify its characteristic, distinguishing cycle of development. It begins in a reaching out of the mind and spirit, an entertainment of possibilities of significance and value in things seen, heard about, imagined. If this exploration of a universe that thereby begins to expand for one is to become education, it

requires, as Whitehead so well presents the matter in his book, *The Aims of Education*, the discipline of order and precision. Further facts must be considered. Ideas must be doubted and tested. In describing this phase of the cycle, one emphasizes the interaction of mind and mind, idea and idea, fact and fact, as forms of that conversation by which the cycle of the mind proceeds. And finally, there is an act of appropriation, a taking to one's self, on one's own terms, the piece of knowledge that has been offered. Although teachers are needed, education is always in part one's own act. As the child grows older, there comes to be more awareness of one's own effort to learn and to become, the third phase of which is an experience of growth by an act of affirmation. Something—an idea, a fact—is offered by book, teacher, or the experience of life. If it flows over and past one, there is no education. If it sticks to one, and becomes training or habit, nevertheless there may be little or no education. If one deals with it, thoughtfully and reasonably, in terms of what one already is and with a result that thereafter one is by some degree more than one was before, there is surely education.

It is this third aspect of the educational experience that concerns me now. For it, the word "participation" might be used to suggest the sharing of the act of learning by both teacher and student, or the part that is taken by the reader of a book in the ideas of the book. The word "incorporation" might emphasize the way in which something learned is built into one's self. And "application" points to that involvement of learning in the life of action with our fellows of which I shall speak later. But I choose the word "creation," because man is a maker, and the making of his better self, through learning, is the end of that activity which I am now examining. It is by trying to make something which we feel to be part of us and yet something which we can give to another, that we make ourselves.

Creation, not always connected closely with education, is an experience that all may have. Sara, age three, creates a song by changing one word of a song her mother sings her. Now she sings a song that is "her very own." The Pueblo Indian potter varies one line of a traditional volute and knows herself an artist. I read today of an American who devotes his life to improving the effectiveness of the handles we grasp on the tools we use. Such creations are narrow, but they provide the sense of being a creator.

Greater creations may be achieved not only by the professional artists or scholars but by other people who are carrying on some private study for the joy it gives them. That part of the Maya hieroglyphic writing known as the Supplementary Series was deciphered by an American chemical engineer in the course of the journeys by train that he took in connection with his business. The glyphs had been for years a puzzle to specialists. The ancient Mediterranean script known as Linear B, written by the Greeks of Crete and Asia Minor, was recently made readable by the efforts of a young English architect.

The great creations of art and science and scholarship no doubt contribute to the education of those who achieve them and also provide works and ideas which become materials for the education of others. The coming to understand something—to understand it in that degree and kind which makes the thing learned a part of one's mind and self—is a creation, too. In this case the thing made is more private and personal. It is never wholly so. Education is an exchange in which each learner helps build the other as he builds himself.

Learning that educates includes an element of invention. In anthropology we speak of a process called "stimulus diffusion." Peoples learn from other peoples not only by imitating one another but also by observing one another and then doing something in a different way that reaches the same end. After Chinese porcelain had been coming to Europe for almost two centuries, European potters, stimulated by the beauty of the Chinese product, set themselves the task of finding a way to make it and succeeded. In the early nineteenth century a Cherokee Indian, who was entirely without schooling or knowledge of English, was impressed by the white man's writing and was stimulated to invent, single-handed, a syllabary. He had not grasped the alphabetic principle, but the example of writing that he saw and only partly understood was enough to cause him to invent. It seems to me that my own experience as a teacher might provide examples of learning by stimulus diffusion. More than once I have been a little startled to hear some old student of mine thank me for the wonderful insight I gave him years ago: he then tells me I said something to him which I am sure I never said. I said something, and he was stimulated to think some-

thing else. I do not recommend this method of instruction; I mention it only to emphasize the element of originality in educative learning.

In the self-educating learner, the imagination, working on the infinite suggestiveness of the world around one, moves the mind to arrangements of idea and value that are both new and old. An idea is not the same when it is learned by you as when it is learned by me, provided the learning be more than mechanical repetition. I am a different learner; the thing learned is thereby different; therefore there is creation. Montaigne made the point when he wrote to the Countess of Gurson advice as to how her son should be brought up. He wrote, "For if by his own discourses he embrace the opinions of Xenophon or Plato, they shall be no longer theirs, but his. He that merely followeth another, traceth nothing, and seeketh nothing." I accept Whitehead's assertion that "the appreciation of literature is really creation." He goes on to say that the words we read and the music we hear are not mere stimuli to evoke an equivalent response. Learning that is educational is more of an original production, a self-modifying act, than is suggested by the words "stimulus" and "response." "No one, no genius other than our own, can make our life live." Whitehead therefore deplored the deadening weight of what he called "inert ideas" in so much schooling. In contrast, to take a thought, a judgment of appreciation, or the significance of a fact into one's own thoughts and feelings, is to give it the place there which one's self feels to be just, is to perform an act of creation in the self. I think of this distinction between inert ideas and the self-modifying creative act when I read a bad textbook and elsewhere listen to a good teacher. The textbook offers me inert ideas. The good teacher—man or book—offers me something of which to make something of my own. I am led along a course of fact and thought with which I am compelled to struggle, which I am compelled myself to order and reform.

When we try to learn in company, or with one companion, this struggle with its creative result is thereby helped along. The efforts of one to understand and to appreciate are provoked and tested by the efforts of the other. This may happen among schoolmates, between husband and wife in an adult education class, and even between people of very different origins and natures. I count among

my teachers a certain Maya Indian whom I knew in his remote village in Yucatán. He talked with me about common human problems out of his own very different experience. When Tolstoy was teaching in his school on his estate, he was one day stirred to excitement in recognizing literary ability in an eleven-year-old peasant boy. A creation akin to his own appeared when the boy insisted that the old peasant in the story he and his schoolmates were writing should be made to put on a *woman's* cloak on hurriedly leaving the hut. Tolstoy saw that the detail was right; Fedka's imagination suggested "the picture of a feeble, narrow-chested peasant . . . the late hour, the peasant undressed for the night . . . the women going and coming, getting water, feeding cattle, the external disorder of the peasant's life." Tolstoy found this revelation of creative power terrible and delightful. He learned something then about children and about art. And the boy Fedka learned as he created.

It follows that education is in opposition to imitation and conformity. These have their place in learning: one conforms in order to learn rules of grammar; one imitates the teacher when he shows how the lathe is to be used or pronounces the French word that one is to repeat. But in education the learner, by his own efforts, by so much makes himself over: there comes about in him a rearrangement of the understood, the important, and the desirable. The rearrangement is not permanent; mind and feeling, with developed discriminations, are now a base from which the cycle begins again. With widened powers to understand and to appreciate, the work in progress is resumed.

Sometimes when we try to educate we only regiment. Consider the children who after viewing an educational television program on clay modeling all proceeded to make the clay rabbit exactly as the demonstrator had made it. We should have applauded this uniformity if the attempt had been to teach the combinations of the multiplication table. For the modeling of rabbits the standardized result was not what was wanted. I fear that many a school talk about freedom and experiment covers hidden pressures to do the thing as the formal method or immediate convenience suggests. Schools are such busy places; schoolteachers have too much to do.

In spite of the report as to the clay rabbits, I have the impression

that on the whole children are more spontaneous, more easily original, than are adults. It would probably be better for adult education if in this respect grownups were more like children. I have some sympathy for that man who, after the lecturer had finished explaining some experiments with a white rat in a maze and had invited questions, arose to ask, "What, in later life, became of the rat?" To pursue, with real interest, even an irrelevance is a step toward education. To accept without question is not.

On the other hand grown people, if they choose, can find times and places for creative learning. They are freer to make their own arrangements for the effort in such a way as to meet their own needs and interests. They are not so busy with mere training, and they do not have so closely to obey the teacher. Indeed, they can well be teachers of each other, as they are in many an organized discussion group today.

As adults we bring to the educational effort something that children cannot bring: the experiences of adult life. Recently I joined in a series of educational discussions in which twenty men took part. Each of us had read the same texts, on one day pages from John Winthrop's history of the Plymouth Colony, on another, a short novel by Melville. But each man brought to the discussion something of his own: that which he had himself lived that bore upon what had been written. Was Captain Vere right in condemning Billy Budd, a youth he knew to be innocent of soul? A man sitting at our table had had comparable responsibility as an army officer. We read a debate as to Communism in the schools and asked the question: Is there anything that should never be taught to anybody? At once one said that theft and murder should never be taught to anybody. But then another spoke, saying that in Counter-Intelligence during the war *he* had been taught theft and murder. We read a paper by William Graham Sumner in praise of capitalism and an economic enterprise absolutely free. The members of this discussion group, executives in growing and successful corporations, brought to Sumner's view an experience that apparently confirmed what Sumner wrote; they adopted his words with no little enthusiasm. But then one pointed out that Sumner's position was strongly unfavorable to all legislation with regard to wages and hours, and, indeed, unfavorable to private charity. And some

of the men present thought well of laws protecting some wage-earners, and many had worked hard at raising money for charities. It seemed that the position they had first adopted had to be reconsidered. The issues of life and the issues of books are united in adult education because the learner has met some of the hard questions in his own experience.

I am struck by Sir Richard Livingstone's statement that "the young, whether they know it or not, live on borrowed property." They borrow, with incomplete understanding, the experiences of older people. In a widened sense, the proposition is true of everybody, young and old. We all live on mental property borrowed from our predecessors. The accumulations of our forefathers' experience, as recorded in books, we only partly understand. We have not had their experiences. As we live our somewhat different lives, we learn again the truths they learned. But they are not quite the same truths. Or, you who find this form of words unacceptable may allow me to say that we come to know the same truths in the contexts of our different experiences.

The learning of the individual may be compared to the learning of each generation, each age. As the age creates out of the knowledge of the past its own new form of learning, so the individual takes from books and discussions parts of an accumulation and creates his own developed self therefrom. I think of how you and I learn, when I read Henry Osborn Taylor's account of how medieval Europeans took and made over classical and patristic learning. He stresses the long time that it took for the medieval thinkers really to assimilate, to make their own, what they read:

> With each succeeding generation, the subjects of medieval study were made more closely parts of the intelligence occupied with them, because the matter had been constantly restated and restudied in terms more nearly adapted to the comprehension of the men who were learning and restating it.

At length they made the ancient thought "dynamically their own . . . they could think for themselves in its terms, think almost originally and creatively, and could present as their own the matter of their thoughts in restatements, that is, in forms essentially new." This is, I think, the outcome that is education also in the individual.

As life is so short, it is not often that one reaches, in more than a few matters, this complete assimilation into one's own mind and feeling, of that which is given one to learn. The period of schooling is surely too brief. As one continues education throughout life, this assimilation, this conversion of another's learning into one's own creation, is more nearly reached.

Taylor sees, in the literature of medieval times, three stages in the assimilation of the earlier learning. First, what he calls "conning": the ancient book was read, and hardly more than repeated. The theologian copied an early text and added only a simple commentary. Second, "its more vital appropriation." This stage Taylor finds expressed in medieval works in which, with little form, the writer set down an opinion he had read in one authority, then a contrasting opinion from some other authority, and finally offered his own attempt at adjustment of the two. I have seen the equivalent in many a good student's notebook. In this stage education is occurring. The third stage—still following Taylor—is represented by the few really great medieval writings, notably the *Summa* of Aquinas, in which a great body of learning, thoroughly considered, is restated with added elements of thought. This last stage of the assimilation of "borrowed property" is, in small degree, represented in our own separate educations in so far as we restate parts of others' learning with elements of thought drawn from our growing structure of judgments of the relevant, the important, and the good.

I would cling a moment longer to this comparison of education with the assimilation by a whole people of the learning of earlier times. Taylor emphasizes the important part of emotion in the development of medieval learning. He says that the transformation of classical and patristic culture was accomplished as much by artists as by scholars, and that the emotions, the passions, of the scholars were involved in their recasting of earlier thought. He reminds us of the cathedral of Chartres, of the devotional prose of St. Anselm, of the chivalric romances, and especially of the passionate feeling that imbued religious thought. I think that in its own minor form that learning by the individual which educates is also carried along in a current of feeling. Teach your pupil to think? Livingstone's replies, "Teach your pupil to think and feel."

It seems to me that feeling is a part of thinking, that we learn

easily when we care strongly about what it is that we are learning. The feeling is itself something to be enlarged and disciplined. The passion with which one approaches a topic is both a hindrance to learning and a great strength. It makes it difficult to think clearly but it provides an energy for thinking at all. I felt both the advantage and the disadvantage of strong feeling in intellectual exercise in the course of that series of discussions with business executives that I just mentioned. These men came to the discussions with strong and favorable feelings about the free enterprise system and the importance of increasing material production. They also had strong feelings about taxes. As these were two subjects in which my own feelings were somewhat less forcefully mixed, from my point of view the emotional involvements of these men were something of an obstacle to their clear and critical examination of productivity as an element in the good life. On the other hand, it was their very passion with regard to these questions that carried them into the subject, carried them into it with a fierce intensity. Then it was that I was reminded of the strong feelings of the medieval churchmen and thought for a moment that the disputation in which I was taking part was as much theological, in a broad sense, as it was economic. Someone indeed raised the question if there was not a religious quality about faith in free enterprise and material production. The discussion became a very good one.

In talking about the place of feeling in education, Livingstone's principal point is that the discipline and the cultivation of appreciation are essential objectives. The making of the better self is not only a training of the intellect. It includes also the improvement of those discriminations by which we see that a thing is beautiful and good and admit it not only to our understanding but to our delight. One attends to something in the world about us not always to act upon it, not always to analyze it, but sometimes with an attitude of simple openness to its goodness. This attitude is itself subject to development, to refinement. In it feeling is a strong component. In this aspect of education passion is controlled, and feeling enhanced and made sensitive to disciplined judgments. Livingtone refers to this part of educated men as the "other eye . . . the eye which enables them to contemplate, enjoy, and adore." And Whitehead puts it roundly when he says that beauty is the "aim of the universe."

In this lecture I have spoken of education as a making, through learning, of a better self. I have put forward a conception of education that identifies it with the growth of the individual. In the process whereby we try through study and discussion to effect that growth I have emphasized what is personal, original, creative. It would almost seem, from this emphasis, that education is something that any man should be able to do out of his own unaided experience, as if the attempt had not been made before.

Of course this is not true. Education is possible only because we have access to the learning achieved by those who lived before us, and the making of the self that is education finds its building materials in that older learning. The comparison of the education of the individual with the mastery of classical knowledge by the thinkers of the Middle Ages is not only a comparison. The education of the individual and the transmission of the common heritage are aspects of the same thing. The learning of each one of us is a part of that learning whereby our age takes over, and yet remakes, the learning of the peoples who lived before us. While we seek our own education, we also work at the transmission of knowledge through the generations.

Therefore becoming educated is a social obligation as well as a personal privilege. If all the books were burned and no one told us legends of the past, education and civilization would collapse together. Our studies make our times as well as ourselves.

If, then, I send my child to school, I am concerned not only with what the school helps to make of him but also with what the schools —and all other efforts to educate—make of all of us. I am involved in decisions as to what to study, and what kind of person is to be made by the studying, both for myself or my child and for all of us, everywhere.

As I think about what I have said here, it seems to me that I have evaded a question that lies behind the matters that I have talked about. I cannot answer the question, but I can point out the direction in which I think we can go in continuing to struggle with it.

I have said that education is an individual enterprise. And also, in talking about the intercourse we have with one another in the course of education, in admitting that we borrow the intellectual and moral property of other people, living and dead, in our studies,

I recognize that education is a social experience. How much is individual, and how much is in common with others? I have said that in education mind and feeling explore, converse, and then create. Of what material is this creation accomplished? I have replied: Of two experiences, my own, and that stock of experience which has been accumulated for me by millions of predecessors.

Then should I not be told: Define, then, this common stock. Tell us what books we are to read, to what learning we are to attend. Does it matter whether we all choose different books? Shall I study Sanskrit literature while another studies mining and metallurgy in America? I made a comparison between the assimilation of ancient learning by scholars of the Middle Ages and the education of the modern American. But is not the comparison more than a little misleading? Modern Americans are not in the position of medieval scholars. Then the Western Europeans had but the Western heritage to consider, and hundreds of years in which social change went but slowly, as compared with the explosive changes of today. Today we have the world's traditions open to us; the people and the problems and the heritage of every people and nation impinge upon us; and the rapidity with which changing circumstances demand instant decisions makes it impossible to find an exclusive basis for an education of a hundred and sixty million people in the deliberate reconsideration, throughout a dozen generations, of a few related books. Your description of the educational experience is all very well, I hear it said, but what, today, shall we teach in the schools? And what shall be the content of adult education?

The question I have failed to put until just now may be expressed in terms of the problem of choice of the more ultimate values, the conceptions of goodness which education helps us to form. I spoke of education as the rearrangement of the important and the desirable. Is each to decide for himself what is important and desirable, and is each resulting program of education as good as any other? I said that education is the making of a better self. What is "better"? If my neighbor chooses to educate his children for better delinquency, or to revive Nazism, is his view of education to carry as much weight as my own?

What shall we study? For what moral end, if any, shall we study it? For a long time education was conceived as the inculcation of

common values through the reading of the great books of the Western tradition. It is so conceived by many today, although the books are not widely read, and although many people are troubled by a lack of common values in America. In Livingstone's essay on "Character and Its Training" there is an eloquent statement of the view that common culture and common values are indispensable and that the source for these is still to be found in the exhibition of intellectual and moral excellence in the great men and the great works of the West. Others have expressed similar views, and Robert Hutchins and Mortimer Adler have more than stated this position: they have done something about it in effecting uniform publication of certain of these books and in getting thousands of Americans to read them.

I think that my own position is the same, with variations. I share the view that education requires reasonable discussion and that the best basis therefor is a good book that everybody in the discussion has read. I think, too, that many good books have been produced in the Western world. And I agree also with the men I have mentioned in supposing that it is part of the good life to share with one's wife or neighbor or fellow citizen strong convictions, born out of common experience or common learning, as to what is good and what is beautiful. I think that to live together without common values may be possible, but that it would be a life lonely and bare. That I think so I have been helped to see by David Riesman who in some pages of his stimulating writings has suggested a different position. (I do not think he has advocated it.) He tells us that people may live together in peace, may cooperate, without sharing common preconceptions. He reminds us of those social inventions, such as the market and skills of negotiation, that allow each man to get along with all the others by putting forward only some part of himself. To get along, he goes on to say, requires procedural consensus, "some shared values of a very general sort like due process, and among sufficient people in strategic locations, some less-than-fanatical attitude toward compromise and even corruption." Reading this, I tried to think of myself sitting somewhere reasonably secure from war and crime because of the market and procedural rules, like traffic regulations, and because other people somewhere were compromising skillfully with corruption. I tried to think of a

nation and a world held together by these things and nothing else. And, passing the question whether in such an America I should in fact be safe, I felt pretty sure I should not like it. I should feel more than a little cold. A nation run only by traffic rules and the convenient compromising expediencies of other people is not the kind of nation I want, hardly more than it is the kind of family I want.

So I am for continuing the quest for values. I even see no harm in using the word and in sometimes talking about the subject. But I think we can promise each other only a quest. The alternative to more cooperation through the market and procedural rules is not a return to a real or imagined condition of agreement as to values "based on choicelessness." Choice is the condition of man today and for the future, so long as man is free. The alternative to a life of expediency is not to turn back to some moral authority of the past but to press forward, each now seeking that part of the good which he find he needs and which he finds he shares with others.

The books of the West will continue to help us. But we cannot expect them to do for us just what they did for those who read them in times when the meaning of life was found in an education and an experience more nearly the same for a few people in all Western Europe than it is today for many people in the whole world. We shall read those books against the questions and emphases of today: against the impact of our discovery of man's irrationality, against the involvement of all nations in a common fate, against the evil we have come to see that men can do, against the hydrogen bomb. The old books were written without knowledge of the profound alterations in man's condition. Yet the books of the West record a magnificent conversation. And now the conversation continues; things said before need to be said now in different ways to meet the questions of the changed condition of mankind. And to the conversation of the West come now to be joined the conversations that other peoples—Chinese, Indians, Muslims—have had, each within that tradition. Already a set of Great Books of the Western World appears just a trifle parochial. Many an Oriental has read some of them as well as great books of his own tradition, and soon we of the West shall find it quite natural to read his books as well as our own. For all traditions are becoming common property. The conversation becomes world-wide.

It seems to me that the state of education in our times and for any future which I should like my children to enjoy is one in which many choices are open to him who seeks to make himself grow. We shall continue to talk with many kinds of people who have different heritages from the past, and who take different positions with regard to the content and the source of moral authority. There will be some who find an ultimate authority in some chosen expression of ethical and religious rule. There will be others who are seeking certainty. There will be still others who do not carry on the search, finding that they can decide to do this and not do that, with satisfaction to themselves, but without certainty.

In one of the stories written by the Swedish poet, Pär Lagerkvist, mankind, moving through eternity, fail to find God when they all set out to seek certainty, and find him only when they go "to demand of him his boundlessness, his anguish and his space without end." And when God, an old man sawing wood, replies to their question as to why he did all this to them, that his only intention was that men should never be content with nothing, the woodsawyer seems to grow tall, immense, and mankind move on in eternity having found a kind of peace.

This is where I suppose that we are now. Some of us will continue to search for certainty. I think that those who hope to find it and those who do not are together in so far as they ask questions about the ends of life. That has always been the human quest. Education is part of the pursuit. When we talk to each other in the course of the pursuit, we help each other in the common effort.

The Indian or the Chinese who reads his own book asks these more ultimate questions, and when he does so, he is closer to me, more helpful to my own education, than is my American neighbor who never asks them. It is a curious fact of modern life that one can sometimes find immediate understanding with someone born and brought up in a part of the world remote from one's own, and yet find a gulf of misunderstanding with an American neighbor close at hand. I think this is because the more ultimate questions, of happiness, virtue, and the nature of the good, are the same questions in every tradition, while the seekers and the accepters are more different from each other than are the seekers from one another. There is nowadays some talk about the lack of understanding

between intellectuals and other people in America. Mr. Edward L. Bernays, in an address he gave this year, referred to the current glorification of the doers and the scorn for the thinkers. "Doers" are with us mostly businessmen, and thinkers, I suppose, are in many cases professors. Mr. Bernays' remedy for the bad relations between the two is to urge the doers to use the special knowledge of the thinkers in getting done the things the doers have to do, such as solving problems of distribution and of what is called "industrial relations." It seems to me that this solution ignores the real difficulty. I do not think the misunderstanding or lack of confidence is so much between thinkers and doers, as it is between the people who ask only, "How shall we get this done?" and the people who ask, "Why should we do it?" It is a separation between the questioners and the takers-for-granted. In our country it is mostly material productivity and individual initiative that are taken for granted; in Russia it is a narrow doctrine policed by the state. But when, anywhere in the world, one asks, against some background of experience, some tradition of questioning and answering, the same questions as to the ends of man and the nature of the good, one has joined a conversation and a quest in which all humanity can ultimately share.

The end of man's existence is not cooperation. It is not even safety. It is to live up to the fullest possibilities of humanity. And man is human only as he knows the good and shares that knowing with those to whom he is, in humanity, bound. It is not necessary that we begin with the same assumptions. It is not necessary that we read the same books, though it is very helpful to do so, especially when we meet to carry on education. What, I think, is most necessary for pursuing the conversation is that we ask the same ultimate questions. The question, "Can we all, on this earth, get along together?" is, of course, an immensely important question because it has to be answered successfully if we are to ask any other. But even more important is the question, "Why should we try to do so? What should we work for, live for? What is the good life?"

Lagerkvist's story, about the talk of mankind in eternity in the course of the search for God, seems to me to describe the historic stages of this conversation. Once men talked only each of his own

experience, his own local life. But, as civilization took place, discontent seized us and we began the thoughtful search for meaning, truth, certainty. In the West we associate the beginning of this search with Socrates. Thereafter, for a time, Western mankind seemed to find certainty in some unity of thought. But the movement of man cannot be stayed. We go forward, even toward uncertainty and doubt. Indeed, as our minds grow, so does "the soul's longing"; we must be free to question, to seek, though it is anguish to do so. So we come to a stage in our journey when we are aware that we gather together the experience each has had. In this later stage, when we speak, the words are not about ourselves, "but about the meaning of life, as each sees some part of it, on behalf of everyone." Now, some of us, even in the bad state of the world, begin to ask each question, not as its answer affects only me, or America, or the West, but as it affects all people.

If I should choose a few words to describe the endless act of creation that is education, I should choose these: Education is conversation about the meaning of life, as each sees some part of it, on behalf of everyone. The words are too large for your needs and mine when we prepare to discuss a reading or a topic in some class or discussion group. Though we have in fact joined the quest and entered the "dialogue of civilization," we do not have then to think of our small places in the great enterprise. It is enough if we find the effort a significant joy.

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